This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-17 (canceled)

Claim 18 (new): A method for regulating glass gob mass used in the production of hollow glass containers in an individual section glass forming machine, the individual section glass forming machine having two or more sections each comprising a preform station so that the individual section glass forming machine can simultaneously produce an assortment of hollow glass containers of different weights, the method comprising:

(a) providing a device comprising: (i) a feeder having a feeder head capable of discharging molten glass to form the glass gobs; (ii) at least one plunger disposed in the feeder head; (iii) wherein the at least one plunger is moveable upward and downward in the feeder head in accordance with a changeable movement profile for each section of the glass forming machine, wherein the movement of the at least one plunger influences the mass of the molten glass discharged from the feeder head;

(b) for each said preform station of each said section of the glass forming machine, determining a mass reference value difference for at least one of consecutive glass gobs, the mass reference value difference being determined from a reference desired value and a measured actual value of the mass of said at least one consecutive glass gobs;

(c) for each said preform station, changing the associated movement profile of the plunger based on the mass reference value difference determined in step (b) for use with subsequently-formed glass gobs so that the measured actual mass values of the subsequently-formed glass gobs are made to approximate the reference desired mass value; and

(d) repeating steps (b) and (c) for further subsequently-formed glass gobs such that the adjustment of the movement profile for each preform station of each section can be made in a stepwise manner.

Claim 19 (new): The method of claim 18, wherein the individual section glass forming machine operates on a cyclic basis, and the method further comprises determining after each cycle for each preform station whether the mass reference value difference is greater than a threshold value; and if the mass reference value difference is greater than the threshold value, the plunger movement profile is adjusted for the subsequent cycle.

Claim 20 (new): The method of claim 18, wherein changing the movement profile of the plunger based on the mass reference value difference comprises changing a standstill period for the plunger in a lower and/or upper end position of the plunger.

Claim 21 (new): The method of claim 18, wherein changing the movement profile of the plunger based on the mass reference value difference comprises changing a duration of the downward and/or upward movement of the plunger.

Claim 22 (new): The method of claim 18, wherein changing the movement profile of the plunger based on the mass reference value difference comprises changing a speed structure of the downward and/or upward movement of the plunger.

Claim 23 (new): The method of claim 18, wherein changing the movement profile of the plunger based on the mass reference value difference comprises changing a stroke of the plunger.

Claim 24 (new): The method of claim 18, wherein changing the movement profile of the plunger based on the mass reference value difference comprises changing a position of the plunger in relation to an orifice ring of the feeder head during the stroke of the plunger.

Claim 25 (new): The method of claim 18, wherein the device further comprises at least one plunger holder that extends substantially in a horizontal direction, and the method further comprises determining the movement profile of the plunger using a data record for a movement profile for the plunger holder.

Claim 26 (new): The method of claim 25, wherein the device further comprises a second plunger, and a height adjusting device for moving the second plunger in relation to the plunger holder; the method further comprises moving the second plunger in relation to the plunger holder based on a data record for a movement profile for the second plunger in relation to the plunger holder.

Claim 27 (new): The method of claim 18, wherein:

the feeder head of the device comprises a restrictor pipe that surrounds the plunger, and wherein an axial position of the restrictor pipe can be regulated to compensate for the effects of changes in the viscosity of the molten glass or changes in the glass level in the feeder head upon the mass of the glass containers to be produced; and wherein the individual section glass forming machine operates on a cyclic basis;

and wherein the method further comprises:

following each cycle of the individual section glass forming machine, determining a real mean value of the mass reference value differences of all of the glass gobs produced during the cycle, and changing the axial position of the restrictor pipe prior to the subsequent cycle so that the said real mean value approximates zero during the subsequent cycle; and

following each cycle of the individual section glass forming machine, scaling the mass reference value differences of all of the glass gobs produced during the cycle to produce a fictitious mean value of zero, and changing the movement profiles of the plunger based on the scaled mass reference value differences.

Claim 28 (new): A device for regulating the mass of glass gobs used to produce hollow glass containers in an individual section glass forming machine, the individual section glass forming machine having two or more sections each comprising a preform station so that the individual section glass forming machine can simultaneously produce an assortment of the hollow glass containers of different weights, the device comprising:

a feeder having a feeder head capable of discharging molten glass that forms the glass gobs;

at least one plunger disposed in the feeder head, said at least one plunger being moveable upward and downward in the feeder head in accordance with a changeable movement profile for each section of the glass forming machine, wherein the movement of the at least one plunger influences a mass of the molten glass discharged from the feeder head;

means for determining mass reference value differences for the glass gobs, the mass reference value difference for each of the glass gobs determined from a reference desired value and a measured actual value of the mass of the glass gob for each preform station <u>of each section</u>; and

a control unit in communication with the means for determining said mass reference value difference and which is configured to control the movement profile of the

plunger for each subsequent gob based on the mass reference value difference for each preform station of each section so that the measured actual mass values of subsequently-formed glass gobs are made to approximate the reference desired mass value in a stepwise manner.

Claim 29 (new): The device of claim 28, wherein the individual section glass forming machine operates on a cyclic basis; the control unit determines after each cycle for each preform station whether the mass reference value difference of the glass gob produced during the cycle is greater than a threshold value; and if the mass reference value difference is determined to be greater than the threshold value, the plunger movement profile is adjustable for the subsequent cycle.

Claim 30 (new): The device of claim 28, wherein the control unit changes the movement profiles of the plunger by changing one or more parameters selected from the group including: a standstill period for the plunger in a lower and/or upper end position of the plunger; a duration of the downward and/or upward movement of the plunger; a speed structure of the downward and/or upward movement of the plunger; a stroke of the plunger; and a position of the plunger in relation to an orifice ring of the feeder head during the stroke of the plunger.

Claim 31 (new): The device of claim 28, wherein the device further comprises at least one plunger holder that extends substantially in a horizontal direction; the movement profile of the plunger is determined by a data record for a movement profile for the plunger holder; and the data record is stored in the control unit.

Claim 32 (new): The device of claim 31, wherein the device further comprises a second plunger, the plungers are attached to the plunger holder, and the control unit is a drive controller of the plunger holder.

Claim 33 (new): The device of claim 31, wherein the device further comprises a second plunger and a height adjusting device for moving the second plunger in relation to the plunger holder; and a data record for a movement profile for the second plunger in relation to the plunger holder is stored in an associated drive controller.

Claim 34 (new): The device of claim 28, wherein:

the feeder head comprises a restrictor pipe that surrounds the at least one plunger;

the device further comprises a control circuit for compensating for the effects of changes in the viscosity of the molten glass or changes in the level of the molten glass in the feeder head on the mass of the glass gobs by controlling an axial position of the restrictor pipe;

the individual section glass forming machine operates on a cyclic basis;

following each cycle of the individual section glass forming machine, the device determines a real mean value of the mass reference value differences of all of the glass gobs produced during the cycle, and the device changes the axial position of the restrictor pipe prior to the subsequent cycle so that said real mean value approximates zero during the subsequent cycle; and

following each cycle of the individual section glass forming machine, the device scales the mass reference value differences of all of the glass gobs produced during the cycle to produce a fictitious mean value of zero, and the device changes the movement profiles of the plunger based on the scaled mass reference value differences.

Claim 35 (new): The device of claim 30, wherein the device further comprises at least one plunger holder that extends substantially in a horizontal direction; the movement profile of the plunger is determined by a data record for a movement profile for the plunger holder; and the data record is stored in the control unit.

Claim 36 (new): The device of claim 35, wherein the device further comprises a second plunger, the plungers are attached to the plunger holder, and the control unit is a drive controller of the plunger holder.

Claim 37 (new): The device of claim 35, wherein the device further comprises a second plunger and a height adjusting device for moving the second plunger in relation to the plunger holder; and a data record for a movement profile for the second plunger in relation to the plunger holder is stored in an associated drive controller.

Claim 38 (new): A method for regulating glass gob mass used in the production of hollow glass containers in an individual section glass forming machine, the individual section glass forming machine having multiple sections each comprising a preform station so that the individual

section glass forming machine can simultaneously produce an assortment of hollow glass containers of different weights, the method comprising:

(a) providing a device comprising: (i) a feeder having a feeder head capable of discharging molten glass to form the glass gobs; (ii) at least one plunger disposed in the feeder head; (iii) wherein the at least one plunger is moveable upward and downward in the feeder head in accordance with a changeable movement profile for each section of the glass forming machine, wherein the movement of the at least one plunger influences the mass of the molten glass discharged from the feeder head;

(b) producing said glass gob and delivering it to said preform station;

(c) determining a mass reference value difference for said gob produced in step (b), the mass reference value difference being determined from a reference desired value and a measured actual value of the mass of said produced gob;

(d) changing the plunger movement profile associated with said preform station based on the mass reference value difference determined in step (c) for use with a subsequently-formed glass gob so that the measured actual mass value of the subsequently-formed glass gob is made to approximate the reference desired mass value; and

(e) repeating steps (b) through (d) for further subsequently-formed glass gobs such that the adjustment of the movement profile for each preform station of each section can be made in a stepwise manner.

Claim 39 (new): The method of claim 38 wherein step (d) of changing the movement profile of the plunger further comprises determining whether the mass reference value difference is greater than a threshold value; if the mass reference value difference is greater than the threshold value, then the movement profile of the plunger is changed; if the mass reference value difference is less than the threshold value, then the movement profile of the plunger is not changed.